

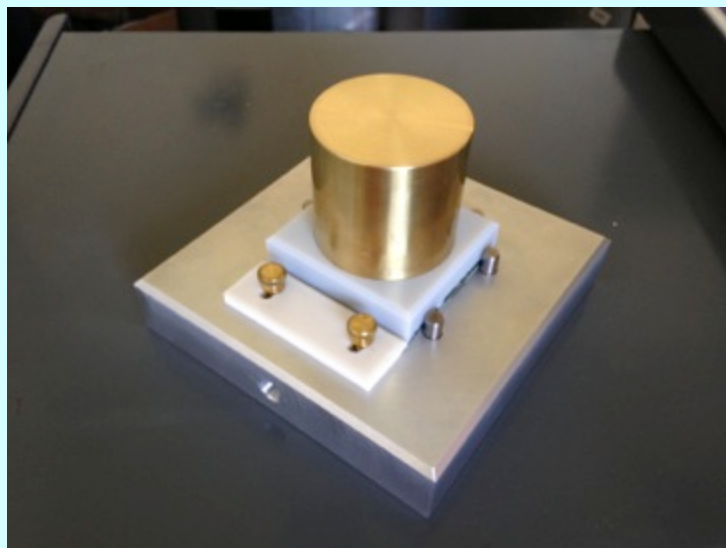
PHENIX WEEKLY PLANNING



Aug. 22, 2013
Don Lynch

This Week

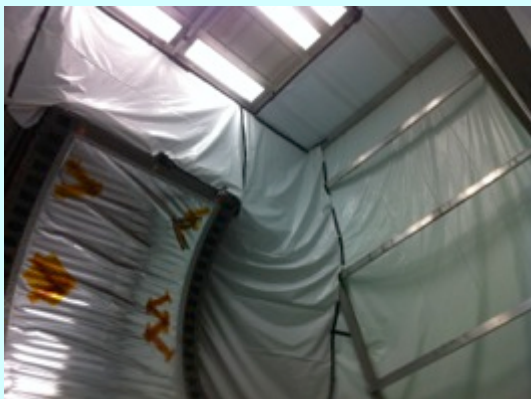
- Continue VTX Repairs/Upgrade
- Continue building VTX strip-pixel staves
- MPC-Ex installation prep
- MuTr Stations 1,2,3 South and Stations 2 & 3 North
continue troubleshooting and repairs
- DC West Repairs
- DC East repairs prep
- Continue sPHENIX support
 - HCal prototype
 - EMCal prototype design continuing
- Future IR evolution modeling



8/22/2013

Next Week

- Start MuTr Station 1 S, Stations 2 & 3 N & S continue troubleshooting & repairs
- Continue VTX Repairs/Upgrade
- Continue building VTX strip-pixel staves
- MPC-Ex installation prep & design/fabrication of assembly fixtures & components
- Start DC West repairs
- Complete DC East repairs
- Continue sPHENIX support
 - HCal prototype
 - EMCal prototype design continuing
- Future IR evolution modeling



VTX/FVTX repairs/upgrades

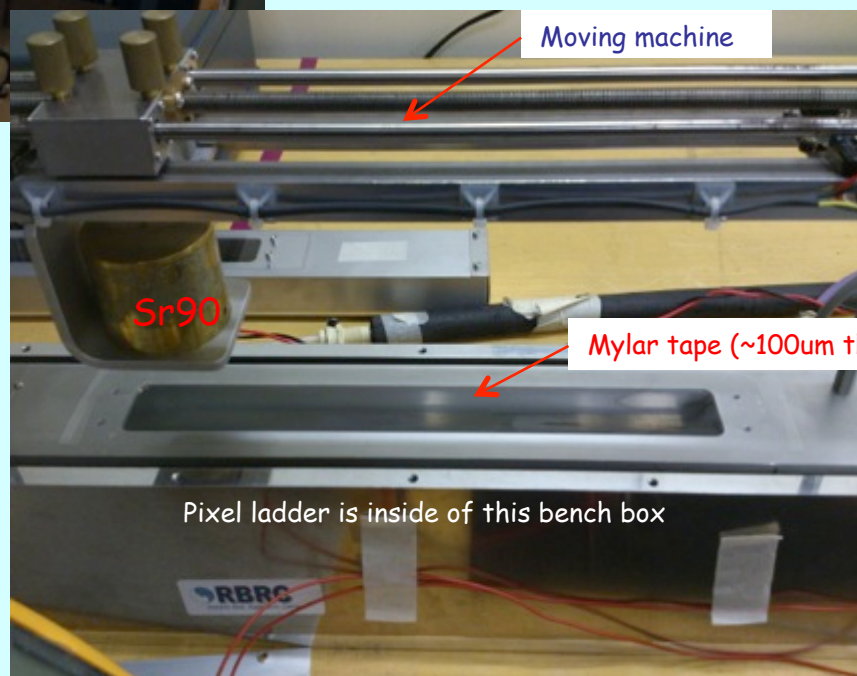
TECHNICAL SUPPORT ROOM



All stripixel stave core to be received by end of next week

Building staves to continue to ~ 9/15

Remaining pixel ladders to be received from Japan by 9/15



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VTX & FVTX Remaining Tasks

- Receive remaining strippixel stave components
- Assemble & test strippixel staves
- Integrate staves & electronics & test
- Receive remaining pixel ladders
- Test pixel ladders
- Assemble East & West VTX & test
- Transport FVTX to Chemistry building.
- Integrate FVTX Integrated into East & West VTX.
- Survey VTX/FVTX assembly
- Transport VTX&FVTX assembly to PHENIX and install on rails.
- Re-install coolant and N₂ lines, LV, signal and HV cables and fibers
- Re-survey full detector in IR
- Re-commission VTX & FVTX

DC East & West Repairs/Upgrade

Getting ready for DC East

DC West repairs nearly complete

May need to repair broken wires later

(need to take down station 1 scaffolding
to Moved West Carriage)



Vlad arriving Monday

B. Fortunato coming Tuesday at 1 PM for Fall protection
& manlift training

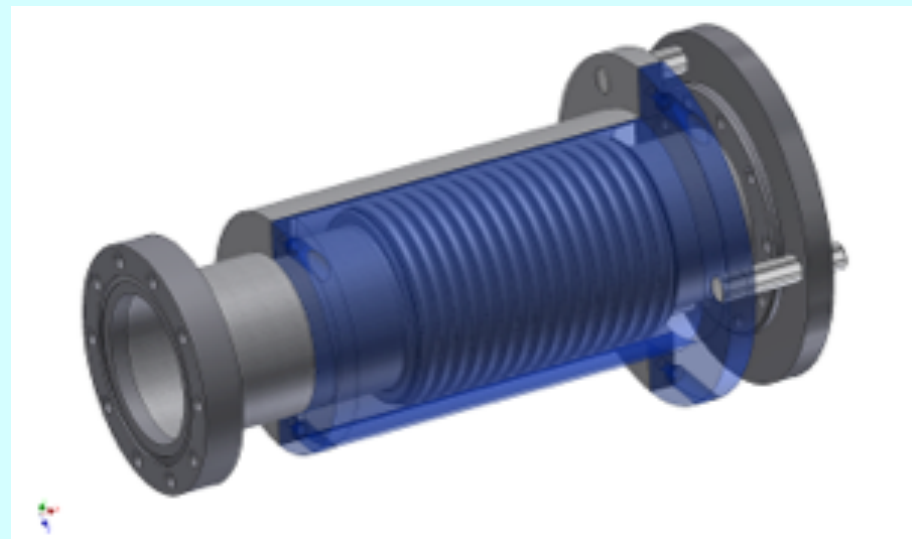
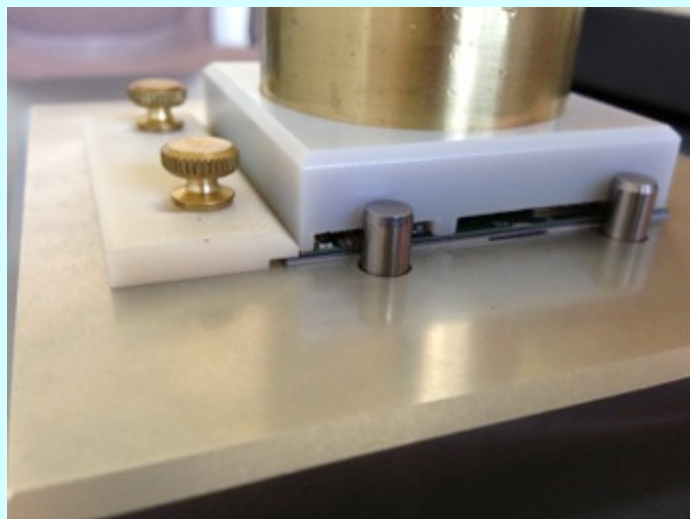
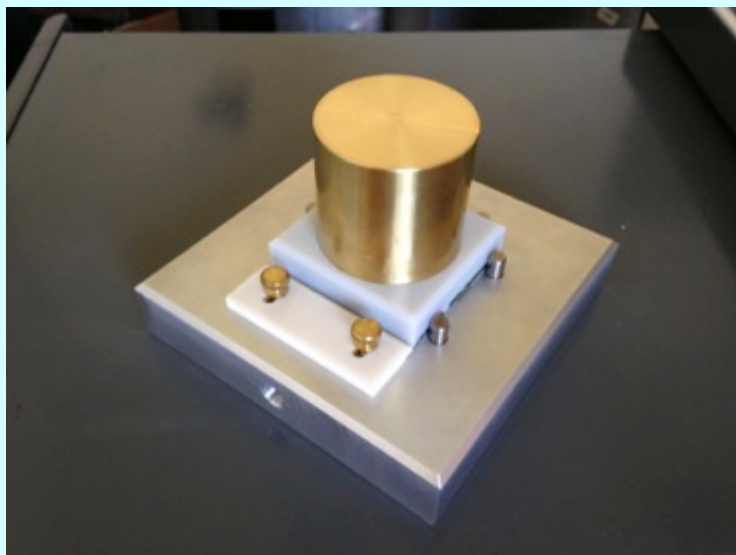
Need 2nd manlift next week.

DC East & West Repairs Summary of Tasks

- East Carriage move to AH - Done
- Work Permit - Done
- Design & Construct tent (similar to tent constructed for DC West last year) to prevent foreign material from entering DC East cavity while window is removed.
- CAD to provide 2 vertical manlifts to allow DC experts to remove and replace window
- Get supplies and materials from Stony Brook for window replacement
- Troubleshooting and repairs on DC West
- Supply Gas, DAQ and Electric to EC East
- Isolate and repair leak on DC East
- Remove and replace window
- Isolate and repair leak under electronics card
- Leak test
- Operational tests
- Remove tent and manlift

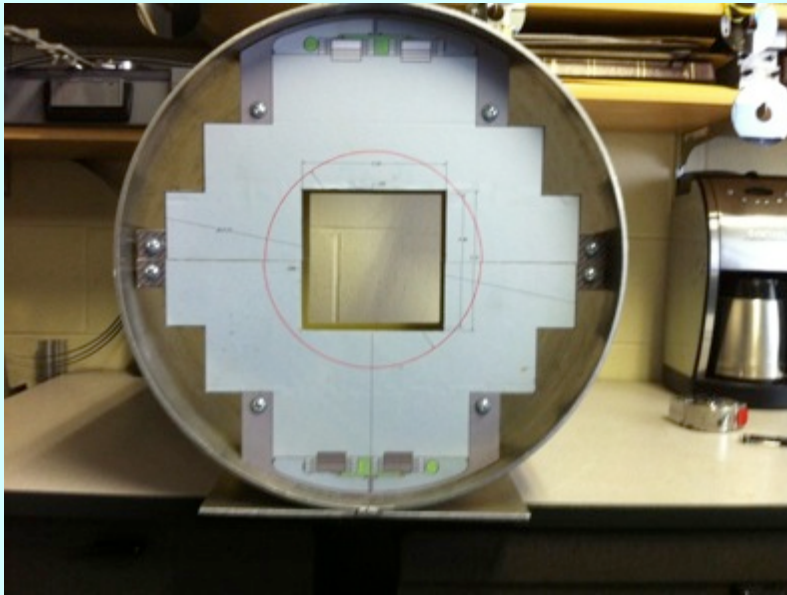
MPC-Ex Initial (Partial) Installation

PHENIX - PROTON BEAM

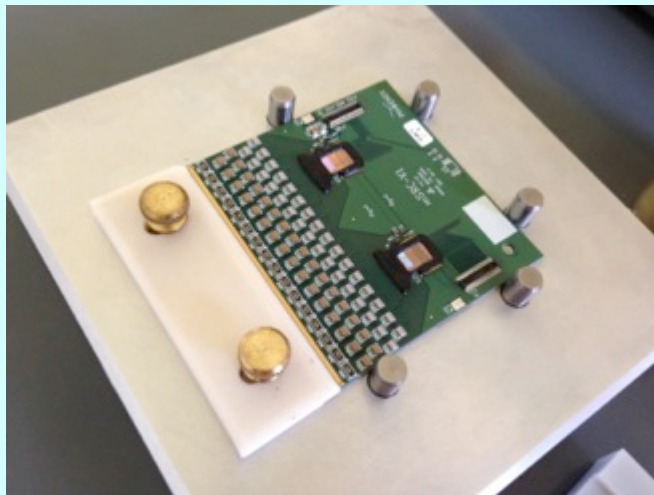
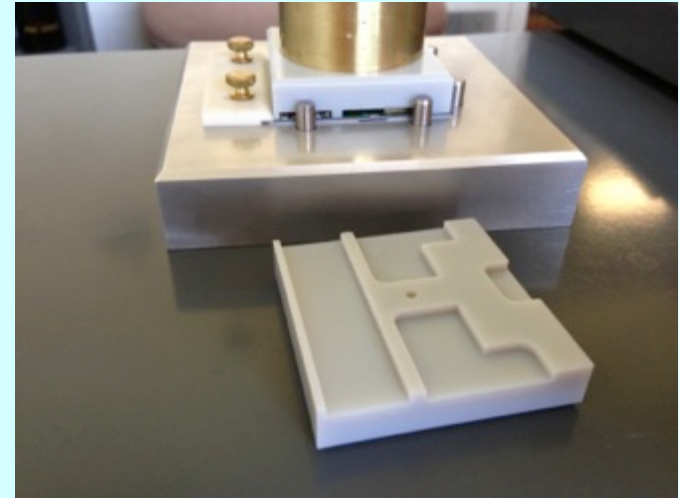


Design vacuum bellows anti-squirm in MPC S Cavity to accommodate MPC-Ex. Parts now at CS for fabrication Raedy by 9/15

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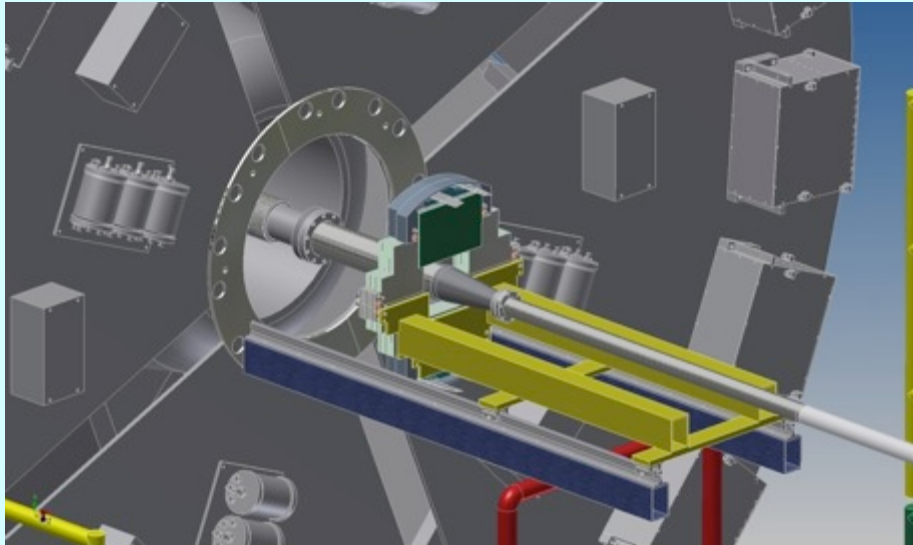


MPC-Ex mockup to be used for cable and utilities routing plans



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PHENIX - SDAOAT - NORM



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MPC-Ex Initial/Partial Installation Summary of Tasks

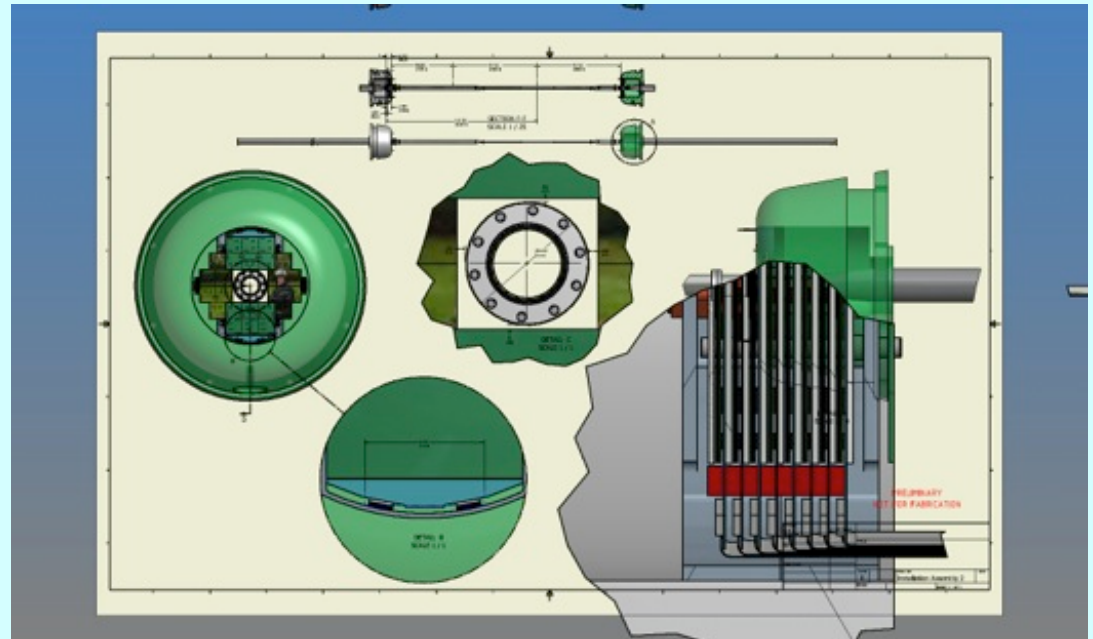
Installation Schedule 11/1-11/15

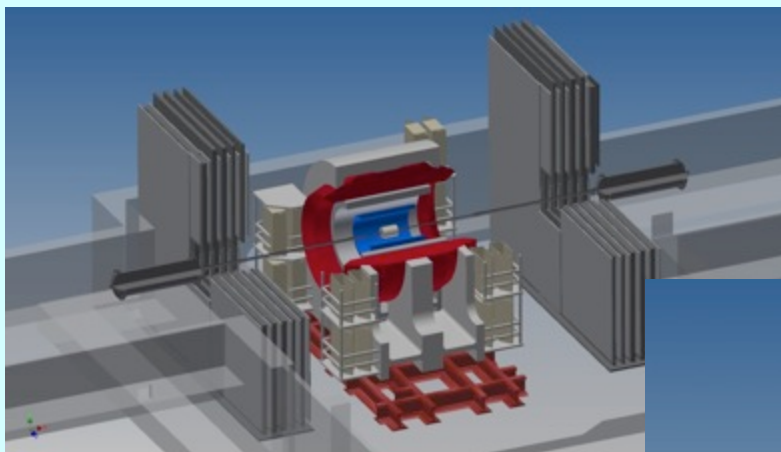
Design assembly, support
and installation fixtures

Assemble and bench test

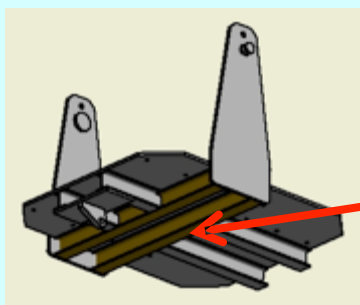
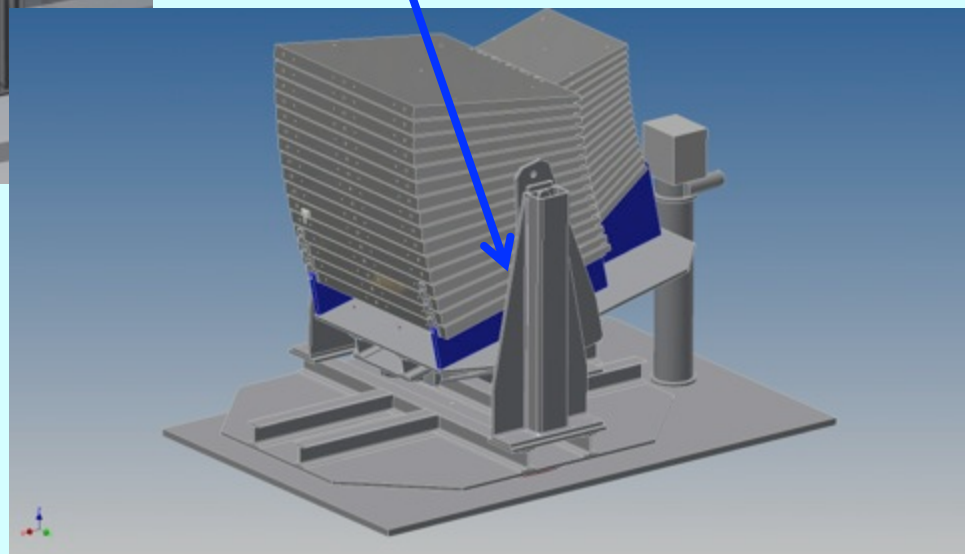
Install

Performance tests





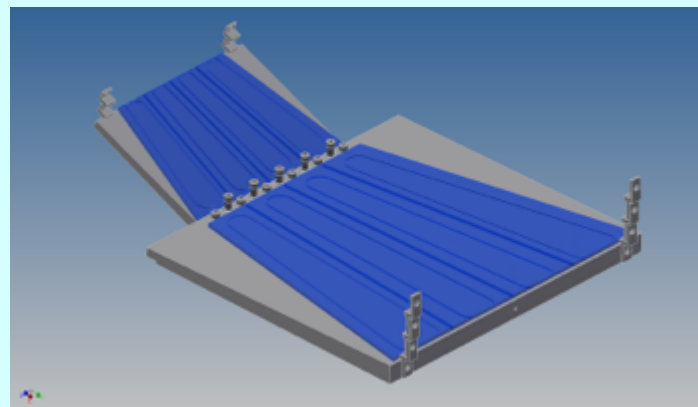
Added reinforcements to support columns to prevent buckling



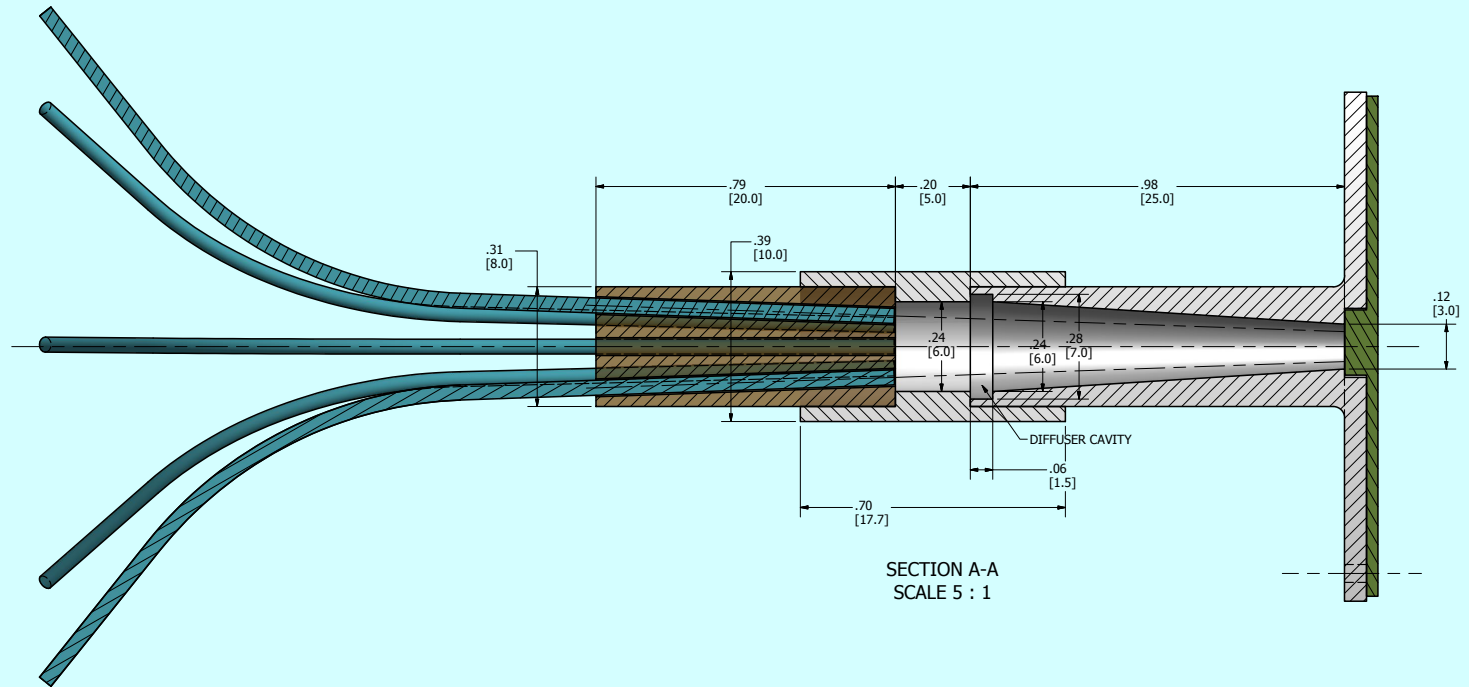
I-beams added to base to stiffen

Hcal prototype component procurement is underway:

Steel and scintillator procurements in progress Steel shipping this week



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Lift Table moved to PHYSICS HiBay.

BABAR Magnet acquisition approved.

J. Haggerty & D. Lynch met with P Wanderer & M. Anerella to discuss shipping and delivery of magnet to Mag. Div., etc.

sPHENIX Prototype Assembly and Test Tasks

TECHNICAL SUPPORT NOTES

Design Hcal and EMCal Prototypes and support components and shipping crates - **in progress**

Procure materials and detail parts - **in progress**

Receive and inspect parts

Assemble prototypes

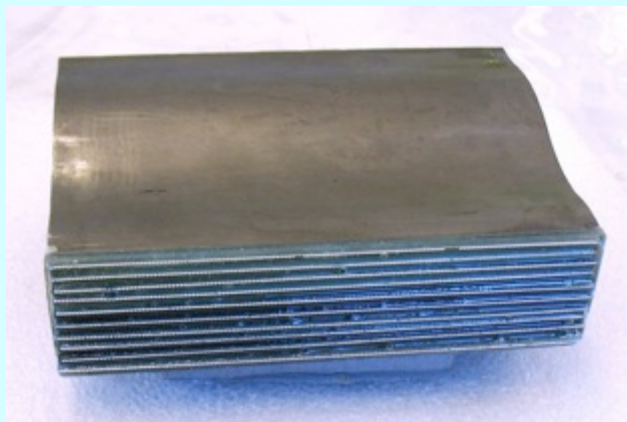
Test assemblies for mechanical fit and function

Package and ship prototypes to FERMI Lab for performance tests

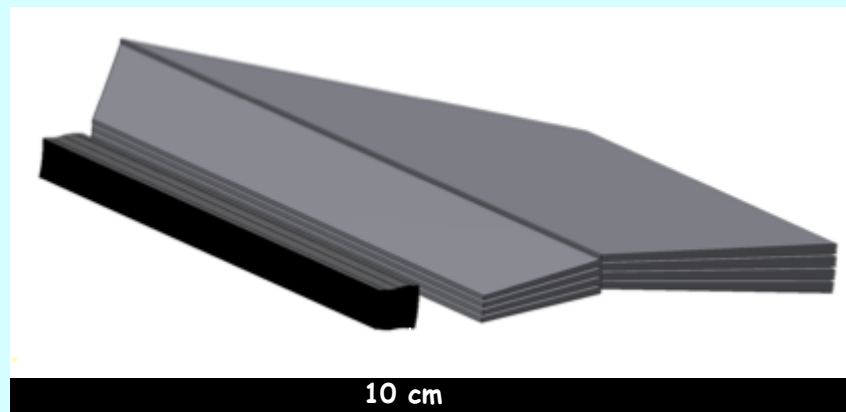
Test and Evaluate at Fermi Lab

EMCal Prototype

Prototype accordion plates with fibers produced as part of SBIR. EMCal for test beam will be flat tapered plates



Prototype "Egg Carton" light collection

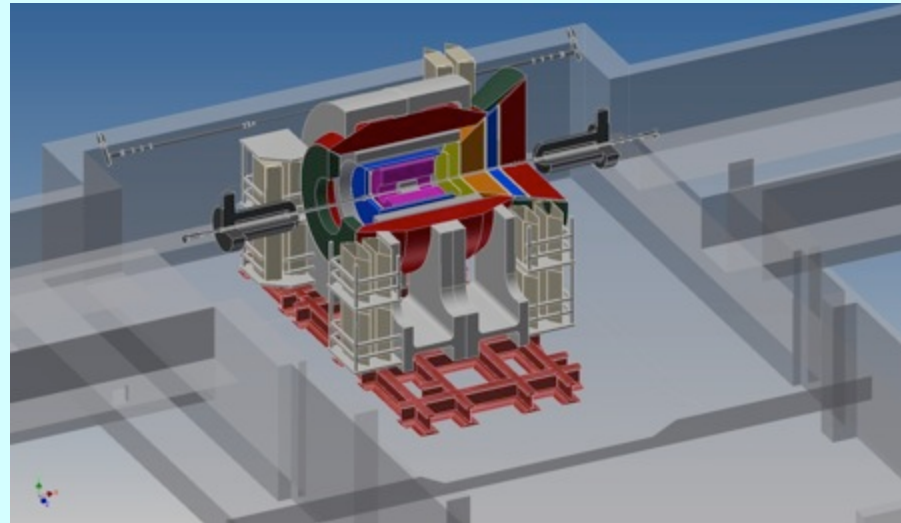
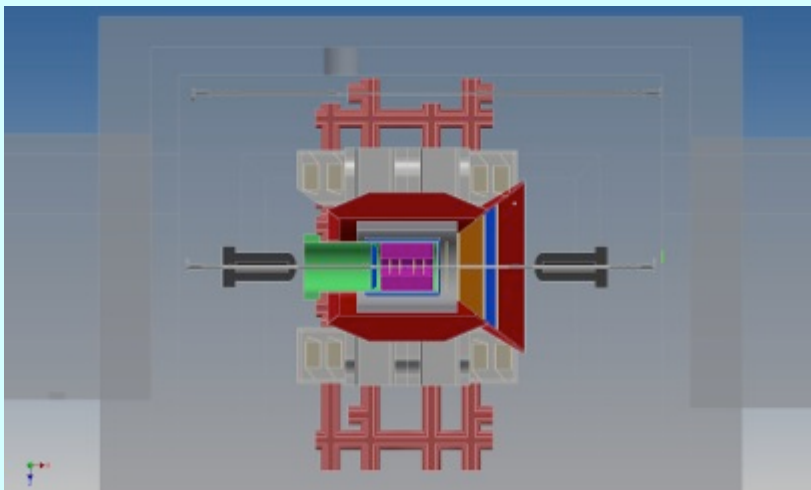


Proto-type EMCal in front of proto-type HCal

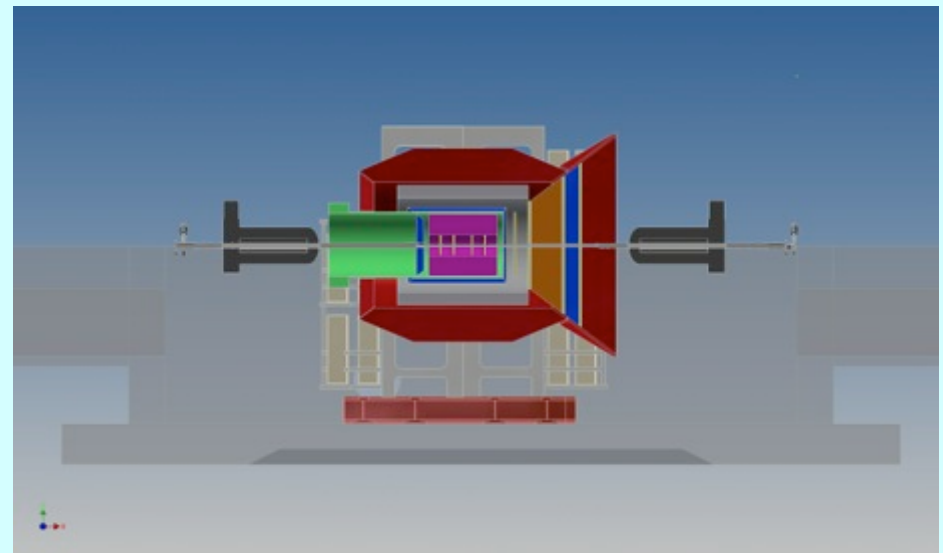
(Photos from Eric slides, from Craig and Sean slides)

ePHENIX

Plan View

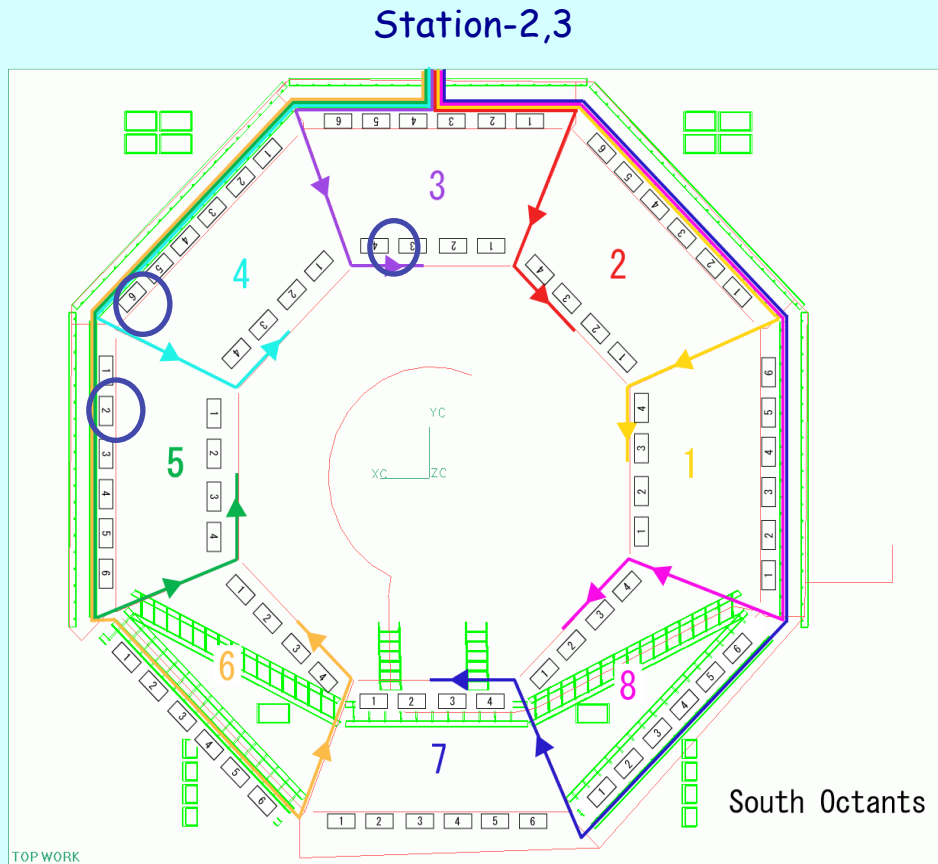


Elevation View

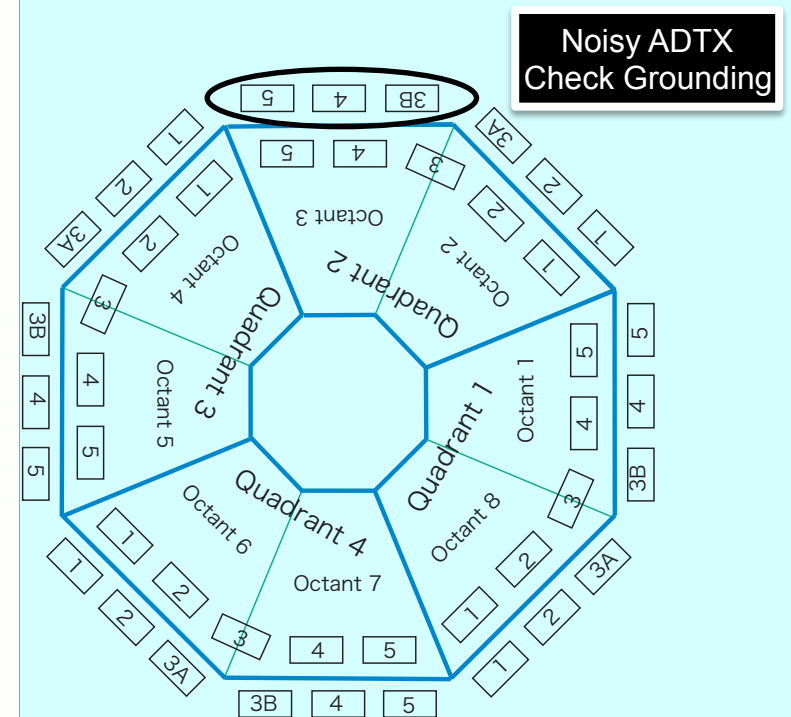


MuTr South Arm Areas to be accessed

PHENIX SOUTH NOISE



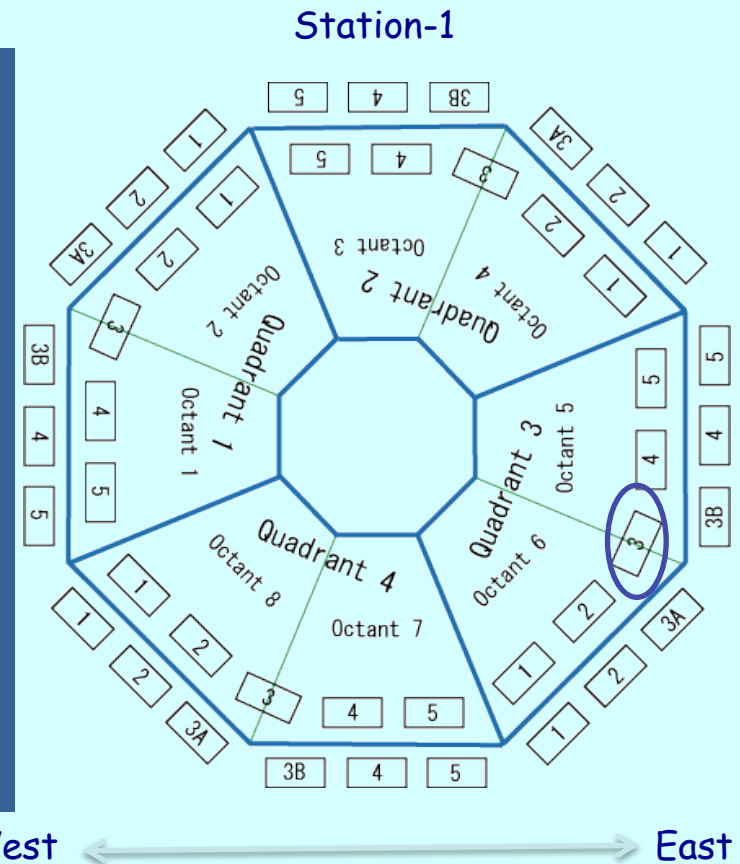
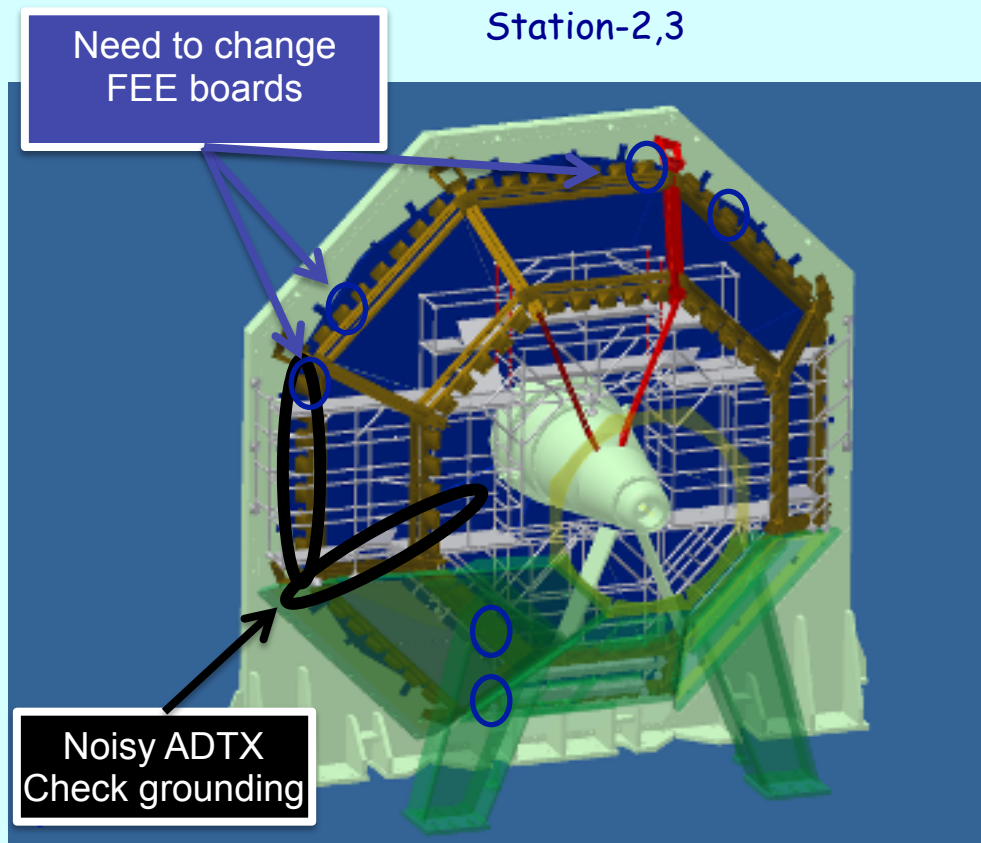
South Station-1 Chassis



Work proceeding MuTr experts expect to finish this week?

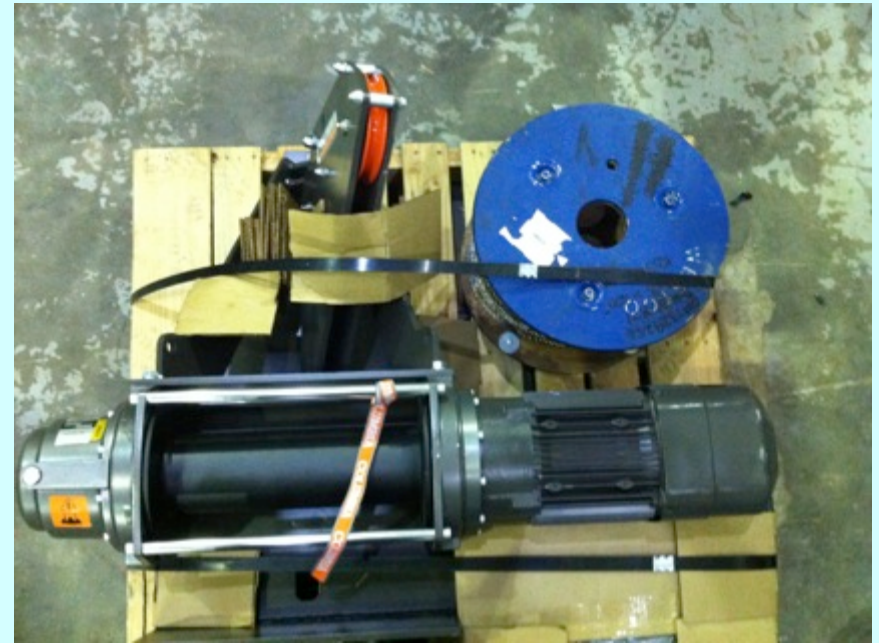
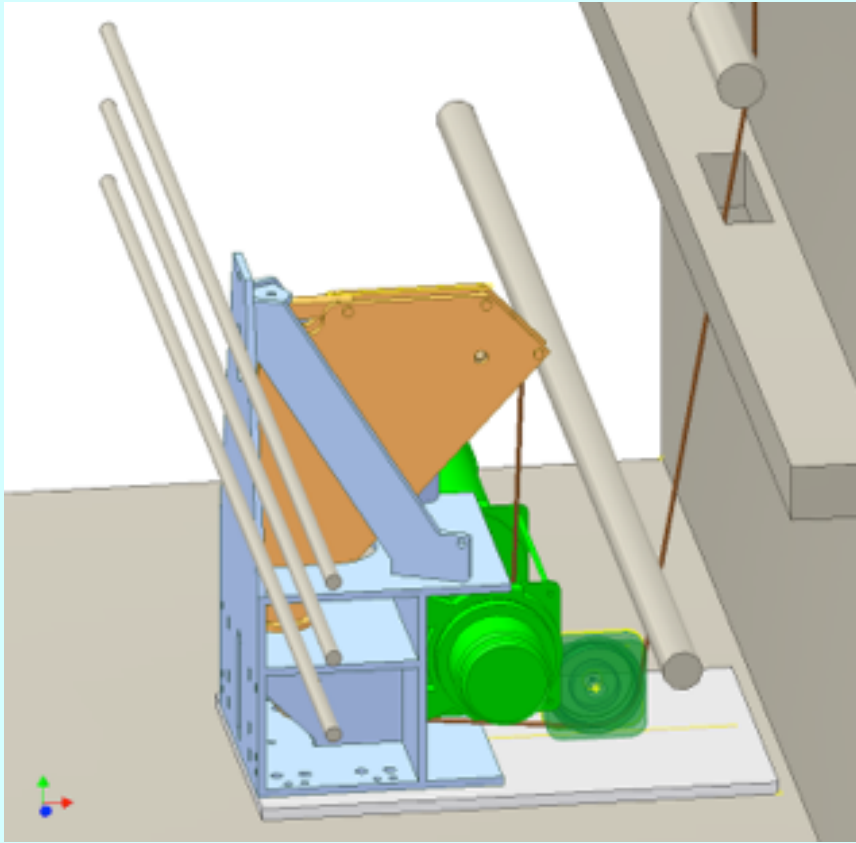
MuTr North Arm Areas to be accessed

PHENIX NORTH ARM



This area will not be accessed during 2013 shutdown.

Window Washer Winch Upgrade



Winch Received, coordinating, Hynan declined to inspect prior to installation

8/22/2013

Window Washer Winch Upgrade Summary of Tasks

Receive and Inspect winch and components - **Received**

Design and Fabricate Winch & Sheave Base

Install and test Winch, integrate with window washer hardware, controls and power

Final Inspection and approval of window washer upgrade

(Note: remote safety pin insertion and retraction was installed and has been in operation since the start of run 13.)

On hold until West Carriage can be opened

Alcohol Chiller Work For Shutdown 2013



Merlin Chiller

➤ Chiller supplied about ½ the flow as in the past.

- Pressure on chiller says ~70-80psi
- Install gauge on supply line and measure actual output pressure.
- Replace chiller with spare if needed.
- Send old chiller out for maintenance or replace.

Done?

Re-Insulate Glycol lines



❖ Remove old polyethylene insulation and wrap and replace with foam rubber insulation.

- Temp of fluid is affected too much by temp change in the gas house.
- Lines are condensing and dripping because of gaps in insulation.

Locate and fix Glycol Leak.



- Replace all three flow meters (compatible with Propylene Glycol)
 - switch to Visi-Float (VFA) for better compatibility
- Redo connections (replace fittings) behind flow meters
 - Re-insulate all cold lines with foam rubber insulation.

Additional Shutdown Work

- ZDC Remove, Test, Recalibrate



2013 Shutdown Schedule

TESTING
SCHEDULE
2013

Prep for 2013 shutdown	Done
Design, Fabricate MPC-Ex	
Define tasks and goals	
Analysis and design of fixtures, tools and procedures	
Fabricate/procure tools and fixtures	
Tests, mockups, prototypes	
Receive, fabricate, modify, finish installables	
Review and approval of parts, tools, fixtures and procedures	
Assembly and QA tests	
VTX Strippixel redesign	Done
VTX Strippixel 1 st article stave assembly	Done
VTX Strippixel 1 st article qualification/performance tests	Done
VTX strippixel stave production	5/20-9/20/2013
VTX Strippixel sensor reclamation	4/1-8/20/2013
VTX Strippixel ladder assembly & Test	7/15-9/27/2013
Pixel Ladder repairs	4/1-9/20/2013
Run 12 Ends	Done
Shutdown Standard Tasks	Done
• Open wall, disassemble wall, Remove MuID Collars	
• Move EC to AH, etc.	
VTX/FVTX Post run tests	Done
Disassemble VTX/FVTX services	Done
July 4 th Holiday	Done
Remove VTX/FVTX and transport to Chemistry Lab	Done
Remove Lampshade MMS, East Vertical	Done
Assemble, Test and Install MPC-Ex (Partial, location TBD)	7/22-10/1/2013

MuTR Troubleshooting, maintenance and repairs	7/22-9/27/2013
Summer Sunday (8/4) Prep and teardown	Done
Summer Sunday (RHIC)	Done
DC West troubleshooting & Repairs	8/5-8/30/2013
DC East Window Upgrade and Related Repairs	8/10-9/27/2013
sPHENIX HCal Prototype Assembly/test	8/19-10/15/2013
Labor Day Holiday	9/2/2013
Re-assemble VTX/FVTX halves	8/19-10/14/2013
Test, survey (at Chemistry and IR) and re-install VTX/FVTX	10/14-10/21/2013
Install & Survey VTX/FVTX in 1008 IR	10/21-11/18/2013
VTX Commissioning	11/18-12/9/2013
Other detector maintenance as required	As required
Infrastructure maintenance as required	As required
TBD prototype tasks	As required
Pre-run commissioning and prep for run 14	11/1-12/31/2012
Veterans Day, Lab Holiday	11/11/2013
Prep for EC roll in	11/1-11/9/2013
Roll in EC	11/10-11/12/2013
Prep IR for run	11/1-11/30/2013
Thanksgiving Holidays	11/28-29/2013
Pink/Blue/White sheets	12/14-12/31/2013
Christmas Holiday	12/24-25/2013
New Year's Day Holiday	1/1/2014
Start run 14	1/2/2014

Safety and Security

From George Goode:

Last week an aerial lift was being used onsite to install glass window panels weighing approximately 450 pounds. This load, in addition to the workers on the lift platform, exceeded the lift manufacturer's specified capacity. When the workers initiated the lift and the load/bucket was approximately two feet off the ground, the Contractor Safety Representative monitoring the aerial lift noticed that two out of four of the wheels were beginning to rise off the ground. The Contractor Safety Representative immediately halted work and the load was returned safely to the ground. There were no injuries or damage to equipment. An investigation has been initiated.

From Ray Karol:

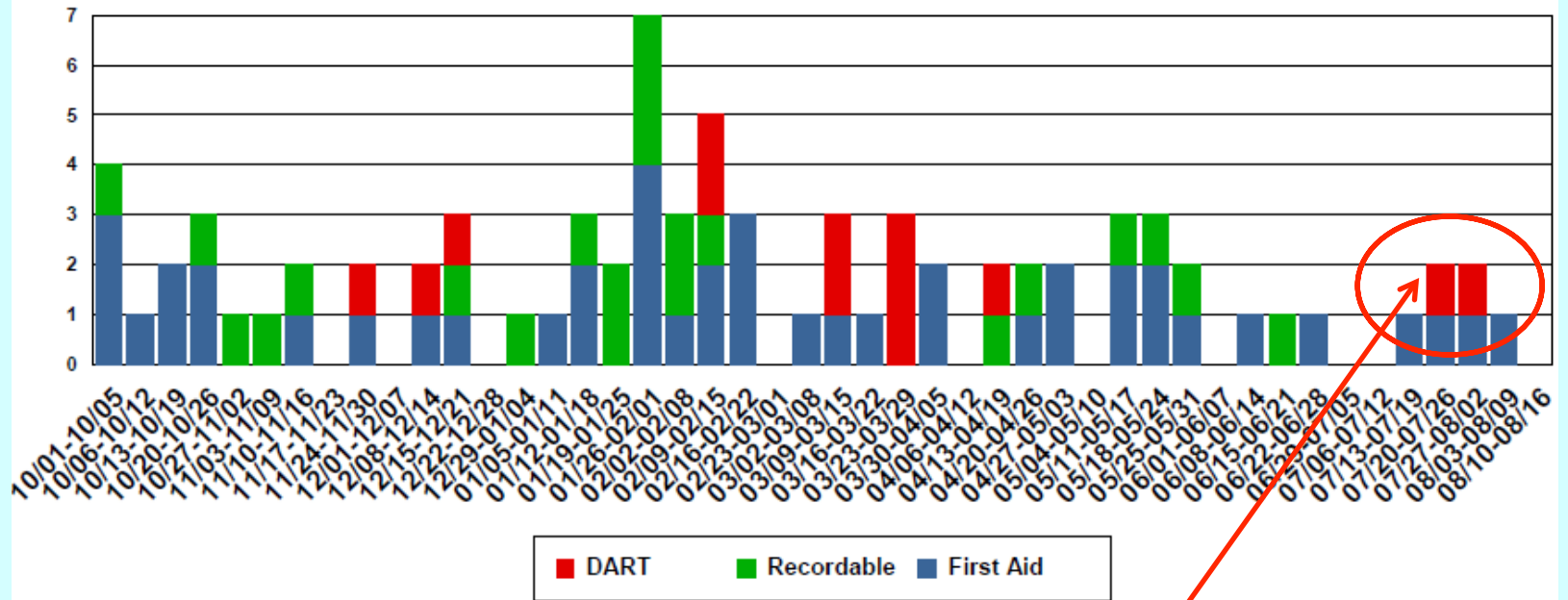
As part of the LOTO upgrade project (see info below), the LOTO web based training has been revised and is currently available on the training web site's list of CBT courses.

(<http://training.bnl.gov/demo/courses/index.html>)

The revised course is a The revised web course is the first step in an expanded LOTO training program. The LOTO training program consists of this web course (initial training in LOTO will have to be completed by attending a NEW classroom training course, available beginning later this month; see the classroom schedule for dates and times), as well as an Organization-specific practical/OJT component, followed by a job performance measure (JPM or checklist filled out by a C-AD LOTPO evaluator) evaluation.



Injuries Per Week (FY) As of 8/16/2013



Injury Status:

FY13 YTD: DART – 13, TRC – 35, First Aid – 44

FY12: DART – 17, TRC – 35, First Aid – 70

FY11: DART – 30, TRC – 44, First Aid – 45

FY13 Injury Listing: <https://intranet.bnl.gov/esh/shsd/seg/Occlnj/BNLInjuries.aspx>

Recent Injuries

		None
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2 new DARTS Added to prior weeks no explanation

Recent Events

8/14/13	Non-Reportable	A worker was doing a pre-use inspection on a new lifting basket with associated sling and hardware. The worker noticed suspect markings on the hook and shackles, and brought the equipment to ESH and QMO for verification. The sling had never been used. (Event Link)
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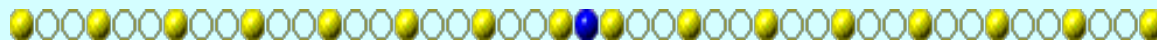
Where To Find PHENIX Engineering Info



As we near the end of August we may need to do some juggling acts with assignments and schedule to maintain the Run 14 start of 1/1/14.

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

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